

# GENERIC APPLICATION SERVER AND METHOD OF OPERATION THEREFOR

## Abstract of the Invention

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A generic application server is capable of simultaneously receiving requests, processing requested work, and returning results using multiple, conceptual thread pools. In addition, functions are programmable as state machines. While executing such a function, when a worker thread encounters a potentially blocking condition, the thread  
10 issues an asynchronous request for data, a state transition is performed, and the thread is released to do other work. After the blocking condition is relieved, another worker thread is scheduled to advance to the next function state and continue the function. Multiple priority work queues are used to facilitate completion of functions already in progress. In addition, lower-priority complex logic threads can be invoked to process computationally  
15 intense logic that may be necessitated by a request. Throttling functions are also implemented, which control the quantity of work accepted into the server and server response time.

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